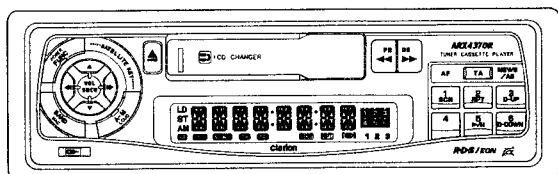


Service Manual



RDS-EON/FM-MPX/MW/LW Radio Cassette Combination With CD Changer Control

Model **ARX4370R**

(PE-1546E-A/illumination: Amber)

(PE-1546E-B/illumination: Green)

SPECIFICATIONS

Radio section

Tuning system: PLL synthesizer tuner
Receiving frequencies: FM 87.5 to 108MHz
MW 531 to 1,602kHz
LW 153 to 279kHz

Tape deck section

Wow & Flutter (WRMS): 0.1%
Channel Separation (1kHz): 45dB
Signal to noise ratio: 120μs(normal) 52dB
Frequency response (± 3dB): 120μs(normal) 30Hz to 16kHz

Power amplifier section

Maximum power output: 120W(30W x 4ch)
Continuous average power output: 14W x 4ch, into 4Ω,
20Hz to 20kHz,
1% THD

Pre-amplifier section

Bass control action (100Hz): ± 10dB
Treble control action (10kHz): ± 10dB
Line output (with A/C 1kHz, 10kΩ): 1.8V

General

Power supply voltage: DC 14.4V (10.8 to 15.6V allowable)
Current consumption: Less than 10A
Speaker impedance: 4Ω (4Ω to 8Ω allowable)
Dimensions (mm): W 178 x H 50 x D 152
Weight: 1.3kg (2.87lb)

FEATURES

1. Electronic quartz-locked PLL tuning
2. AM/FM bands - 1 AM, 3 FM
3. 6/12/18 - disc changer control capability
4. Intro music scan (track)
5. Repeat play (track)
6. Electronic audio controls (volume/bass/treble/balance/fader)
7. 120W (30W x 4ch) maximum power output
8. 2-channel RCA line level output with fader control
9. Amp. turn-on trigger
10. DIN chassis with detachable control panel

COMPONENTS

PE-1546E-A (AMBER)

PE-1546E-B (GREEN)

Main unit		1
Mounting bracket	300-9035-03	1
DCP case	335-5331-00	1
Parts bag		
Hook plate	330-8216-01	2
Lead holder	335-0833-01	1
Special screw	716-0726-01	1
A-lead	850-6681-00	1

※ Specification and design are subject to change without notice for further improvement.

■ To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

6. Cautions in handling flexible PWB.

Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

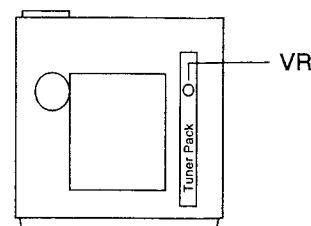
7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

■ TROUBLESHOOTING

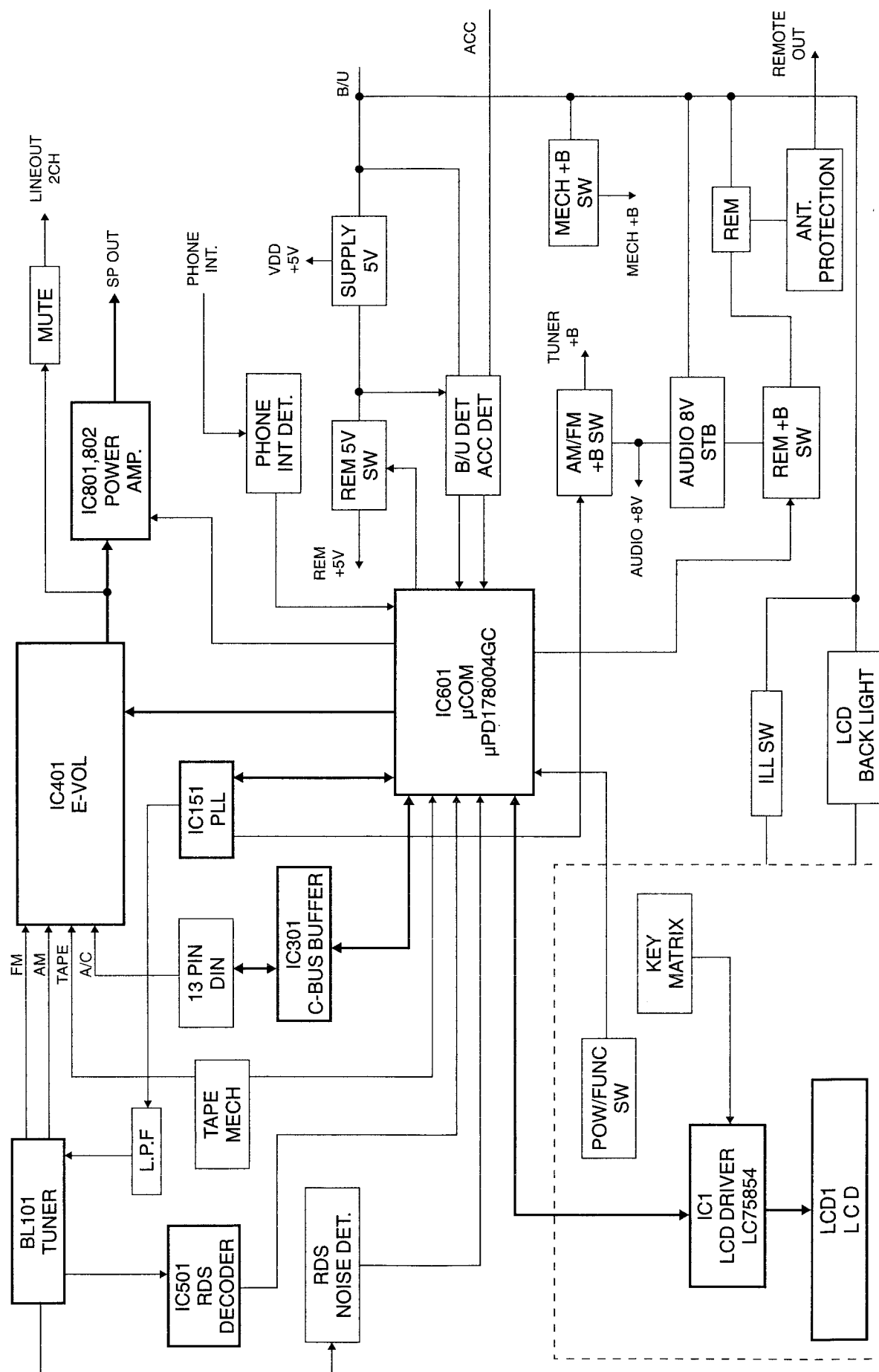
Error display	Procedure
<i>CDAC HHH</i>	This indicates that the playback has been stopped due to a rise in temperature inside the CD changer or a rise in the surrounding temperature. Very likely that the CD changer mechanism is damaged.
<i>CDAC ER2</i>	This indicates that a problem has occurred with the CD changer's mechanism (disc cannot be changed or ejected, etc.) The CD changer mechanism is likely damaged.
<i>CDAC ER3</i>	This indicates that the pickup is out of focus during playback due to scratches on the disc, etc.
<i>CDAC ER6</i>	This indicates that the CD's TOC (table of content) cannot be read, for example because the selected disc is upside down.

■ ADJUSTMENT

Item	Procedure	Instrument
RDS S-Meter	1. Input the 98.1MHz/30dB (400Hz, 22.5kHz DEV) signal and modulation OFF.	SSG Millivoltmeter
	2. Adjust VR on top of the tuner so that the output level at the TP (S-Meter) on main PWB is 3.1±0.1V	



Top side of main unit



EXPLANATION OF IC

μPD178004GC-513-3B9 052-1908-00 System Controller

Outward Form

80 pins, plastic QFP

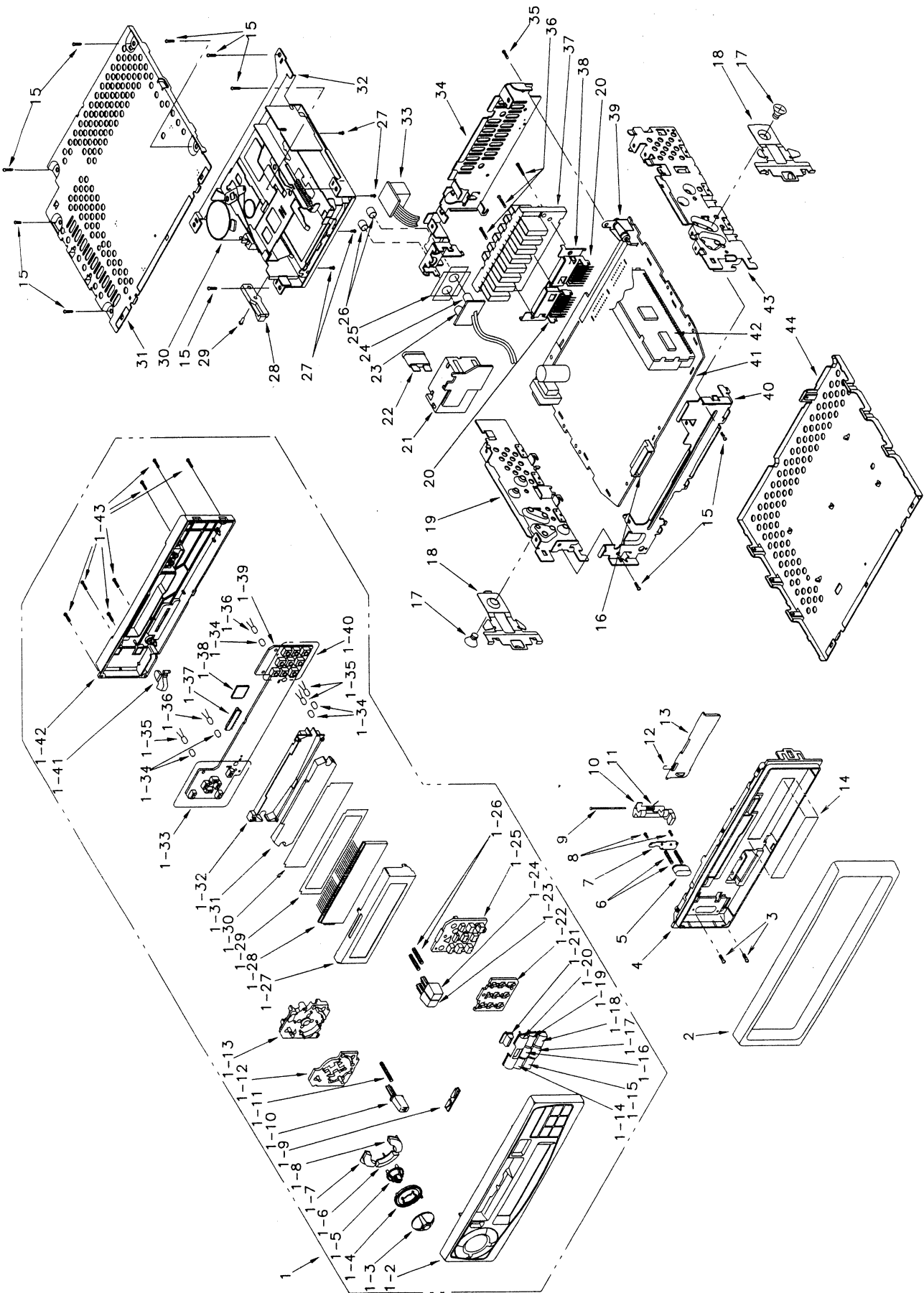
Terminal Description

Pin No	Symbol	I/O	Function
1	KEY-AD	I	FUNC/DCP SW detection terminal 5V ~ 4.5V : DCP OFF 4.5V ~ 4V : DCP ON 1V ~ 0.5V : FUNC ON
2	RDS-S-METER	I	RDS S-meter voltage detection terminal
3	RDS-NOISE1	I	RDS noise level voltage detection terminal
4	RDS-NOISE2	I	GND
5	N.C.	O	GND
6	N.C.	O	GND
7	LCD-SI	I	LCD control serial I/O terminals
8	LCD-SO	O	
9	LCD-CLK	O	
10	LCD-CE	O	
11	N.C.	O	GND
12	CBUS-SO	O	SO,SI,CLK terminal for C-BUS data communication
13	CBUS-SI	I	
14	CBUS-CLK	O	
15	FM-DX/LO	O	FM DX/LO control terminal, output "L" during FM LOCAL seek
16	PLL-CLK	O	PLL control serial output terminals
17	PLL-DO	O	
18	FM-SD	I	FM SD input
19	ST-IND	I	FM stereo indicator input terminal "L" for lights up, always lights off in other modes or seeking
20	EO-SEL	I	Not in use
21	GND	-	GND
22	VDD	-	+5V power supply terminal
23	AM-SD	I	AM SD input terminal
24	N.C.	I	GND
25	N.C.	I	GND
26	N.C.	I	GND
27	PLL-DI	I	PLL control serial input terminal
28	AM-IFC	-	Not in use
29	FM-IFC	-	Not in use
30	VDD-PLL	-	+5V power supply terminal
31	FM-OSC	-	Not in use
32	AM-OSC	-	Not in use
33	GND-PLL	-	GND
34	FM-EO	-	Not in use
35	AM-EO	-	Not in use
36	VPP	-	GND
37	PLL-CE	O	PLL control terminal
38	IF-REQ	O	Output "H" during SEEK mode
39	AM-DX/LO	O	AM DX/LO control terminal, output "H" during AM LOCAL seek
40	N.C.	O	Not in use
41	RDS-MUTE	O	RDS muting output terminal
42	VOL-CLK	O	Electronic volume IC control serial terminal
43	VOL-DATA	O	

Pin No	Symbol	I/O	Function
44	RDS+B	O	Terminal for RDS power supply, "L" during FM reception
45	NOISE-DISCHG	O	Noise detection control terminal
46	RDS-DX/LO	O	Not in use.
47	REM+5	O	Power supply control terminal of microcomputer pull-up, LCD driver and PLL IC
48	REM+B	O	Audio system power supply control terminal
49	N.C.	I	GND
50	N.C.	I	GND
51	N.C.	I	GND
52	N.C.	I	GND
53	N.C.	I	GND
54	N.C.	I	GND
55	N.C.	I	GND
56	N.C.	I	GND
57	N.C.	I	GND
58	N.C.	I	GND
59	PHONE-INT	I	During TEL interruption it becomes "H" and MUTE on
60	SRQ	I	SRQ terminal for C-BUS data communication
61	ACC-CONT	O	Accessory control signal output terminal
62	FWD/REV	I	Detection terminal of Tape play direction. FORWARD : "L"
63	FF/REW	I	Detection terminal for tape FF/REW. During FF/REW : "L"
64	MOTOR	O	Output terminal to control tape unit power supply
65	TAPE-IN	I	Cassette pack insertion detection terminal. Tape-In : "L"
66	RDS-DATA	I	Data, clock input terminal from RDS decoder
67	RDS-CLK	I	
68	B/U-DET	I	Input terminal to detect Back-up power supply
69	ACC-IN	I	Input terminal to detect Acc power supply
70	KEY-INT	I	FUNC key input terminal
71	E3850/E3871	I	Terminal for initialization. "L" for this model
72	SYS-MUTE	O	System muting output terminal. "H" : MUTE on
73	N.C.	I	GND
74	REG-CPU	-	Connected to GND through 0.1μF
75	GND	-	GND
76	X-OUT	O	4.5MHz terminal for ceramic crystal oscillator
77	X-IN	I	
78	REG-OSC	-	Connected to GND through 0.1μF
79	VDD	-	+5V power supply terminal
80	RESET	I	Reset input terminal, connected to +5V power supply

EXPLODED VIEW • PARTS LIST

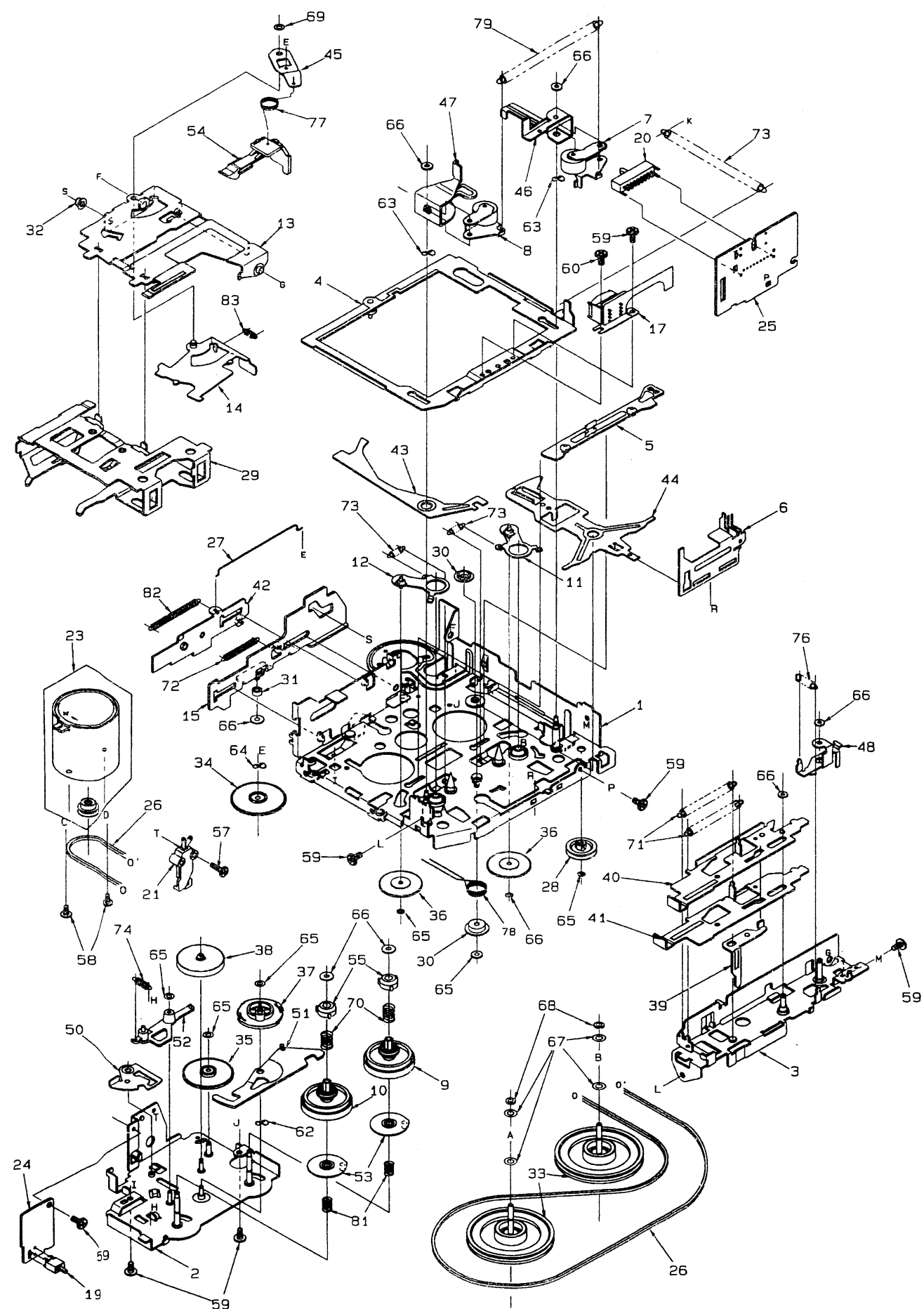
Main Section



NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	940-1809A	DCP ASSY (PE-1546E-A)	1	1-43	716-1721-00	SPECIAL SCREW	7
	940-1808A	DCP ASSY (PE-1546E-B)	1	2	370-5656-02	ESCUTCHEON (OUTER)	1
1-02	370-5670-00	ESCUTCHEON (FRONT)	1	3	716-1792-00	SPECIAL SCREW	2
1-03	380-5394-20	KNOB	1	4	370-5671-00	ESCUTCHEON (INNER)	1
1-04	335-5297-00	JOG PLATE	1	5	382-4078-00	BUTTON (PUSHOUT)	1
1-05	335-5298-00	JOG ARM	1	6	750-3173-00	SPRING (PUSHOUT)	2
1-06	382-4395-21	BUTTON (BAND/MAG)	1	7	331-2002-00	HOOK HOLDER	1
1-07	382-4393-20	BUTTON (POWER/FUNC)	1	8	716-0778-00	WAVE SCREW	2
1-08	382-4397-20	BUTTON (AM/LOUD)	1	9	341-1627-20	SHAFT	1
1-09	335-4874-20	ILLUMI (DOOR)	1	10	335-5312-00	HOOK	1
1-10	382-4521-00	BUTTON (EJECT)	1	11	750-3219-20	SPRING (HOOK)	1
1-11	750-3171-01	SPRING (EJECT)	1	12	750-3169-03	SPRING (DUSTPR. CVR)	1
1-12	345-7818-21	SPONGE	1	13	320-0526-32	DUSTPROOF COVER	1
1-13	335-5307-00	ILLUMI PLATE (LEFT)	1	14	291-0074-00	STICKER (SECURITY)	1
1-14	382-4418-21	BUTTON (1 SCN)	1	15	731-3006-80	TAPTIGHT	10
1-15	382-4421-22	BUTTON (4)	1	16	074-1112-00	OUTLET SOCKET	1
1-16	382-4419-21	BUTTON (2 RPT)	1	17	714-5008-41	MACHINE SCREW	2
1-17	382-4422-21	BUTTON (5 PLAY)	1	18	750-2796-0L	SPRING (SIDE)	2
1-18	382-4423-24	BUTTON (6 D-DOWN)	1	19	305-0242-20	SIDE COVER (LEFT)	1
1-19	382-4420-22	BUTTON (3 D-UP)	1	20	051-2009-00	IC (TDA8561Q)	2
1-20	382-4414-20	BUTTON (AF/NEWS/AF)	1	21	074-1115-00	ISO CONNECTOR	1
1-21	382-4413-20	BUTTON (TA)	1	22	060-0057-56	AUTO FUSE (10A)	1
1-22	345-7815-20	SPONGE (RIGHT)	1	23	075-9004-00	RCA JACK (RED)	1
1-23	382-4519-00	BUTTON (REW)	1	24	075-9003-00	RCA JACK (WHITE)	1
1-24	382-4520-00	BUTTON (FWD)	1	25	347-5216-00	INSULATOR	1
1-25	335-5304-00	ILLUMI PLATE (RIGHT)	1	26	345-3799-0L	RUBBER PART	2
1-26	750-3138-01	SPRING (PROG)	2	27	714-3004-81	MACHINE SCREW	4
1-27	331-1999-00	LCD COVER	1	28	335-5368-00	SPACER (MECH.)	1
1-28	379-1066-41	INDICATOR	1	29	714-2604-81	SPECIAL SCREW	1
1-29	347-5366-20	FILM (BLACK LEXAN)	1	30	930-0726-80	MECHANISM (TOM 2)	1
1-30	347-5365-20	FILM (WHITE KIMOTO)	1	31	303-0457-21	UPPER COVER	1
1-31	335-5308-00	ILLUMI PLATE (LCD)	1	32	331-2044-00	BRACKET (MECHA)	1
1-32	335-5309-00	LCD HOLDER	1	33	074-1022-01	OUTLET SOCKET	1
1-33	013-3812-11	TACT SWITCH (6X3)	7	34	307-0584-00	REAR PLATE	1
1-34	345-4441-37	LAMP CAP (PE-1546E-A)	5	35	714-3006-81	MACHINE SCREW	1
	345-2830-20	LAMP CAP (PE-1546E-B)	5	36	731-3010-80	TAPTIGHT (IC HOLDER)	3
1-35	017-0410-00	PILOT LAMP (14V40mA)	3	37	313-1684-00	HEAT SINK	1
1-36	017-0414-00	PILOT LAMP (8V70mA)	2	38	331-1766-20	IC HOLDER	1
1-37	076-0522-00	PLUG	1	39	092-9000-00	ANTENNA RECEPTOR	1
1-38	051-6013-00	IC (LC75854W)	1	40	309-0686-00	FRONT PLATE	1
1-39	039-0867-00	PWB (SWITCH)	1	41	039-0866-00	PWB (MAIN)	1
1-40	013-6002-50	TACT SWITCH (ALPS)	9	42	880-2080A	TUNER (AM/FM)	1
1-41	382-4470-00	BUTTON (RELEASE)	1	43	305-0247-21	SIDE COVER (RIGHT)	1
1-42	335-5369-00	REAR COVER	1	44	304-0440-20	LOWER CASE	1

EXPLODED VIEW • PARTS LIST

Tape mechanism section: 930-0726-80



NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	960-4421-00	DECK ASSY	1	42	630-2754-00	EJECT LEVER-DCP	1
2	930-4424-00	BOTTOM ASSY	1	43	630-2499-01	CHANGE LEVER	1
3	960-4182-04	FRAME ASSY	1	44	630-2501-02	CHANGE PLATE	1
4	960-4423-00	HEAD-P-ASSY	1	45	630-2419-02	SWING ARM	1
5	960-4186-02	FF-REW-ASSY	1	46	630-2505-02	FF-REW-LINK	1
6	960-4427-00	HEAD-SW-ASSY	1	47	630-2506-05	RELEASE LINK	1
7	960-4188-03	ROLLER ASSY F	1	48	630-2507-04	LOCK LINK	1
8	960-4189-03	ROLLER ASSY R	1	50	630-2529-02	MUTE PLATE	1
9	960-4190-09	REEL ASSY F	1	51	631-1958-05	CHECK LINK	1
10	960-4191-09	REEL ASSY R	1	52	631-1959-01	CHANGE LINK	1
11	960-4192-02	IDLER ASSY F	1	53	631-1961-03	CHECK PLATE	2
12	960-4193-02	IDLER ASSY R	1	54	631-0658-01	PACK STOPPER	1
13	960-4422-00	GUIDE ARM ASSY	1	55	631-1967-00	SLIDE BUSH	2
14	960-4141-04	OFF ARM ASSY	1	57	714-2008-81	MACHINE SCREW	1
15	960-4425-00	EJECT P-ASSY	1	58	716-0484-02	SCREW	2
17	011-0313-15	HEAD	1	59	716-1471-00	S-TIGHT	7
19	013-3906-00	SWITCH	1	60	716-1473-01	HEAD SCREW	1
20	013-3922-00	SWITCH	1	62	745-0752-00	PLATE SPRING	1
21	013-3924-00	SWITCH	1	63	745-0756-00	SPRING WASHER	2
23	SMA-141-100	DC MOTOR ASSY	1	64	746-0712-03	WASHER	1
24	039-0726-00	PWB	1	65	746-0724-00	WASHER	6
25	099-9669-00	PWB	1	66	746-0768-00	WASHER	8
26	602-0115-00	BELT	1	67	746-0839-00	CAPSTAN WASHER	4
27	750-2860-01	ROD SPRING	1	68	746-0869-00	WASHER	2
28	604-0042-01	TENSION PULLEY	1	69	746-0622-01	WASHER	1
29	606-0100-05	PACK GUIDE	1	70	750-2564-01	SLIDE SPRING	2
30	610-0334-01	HEAD ROLLER B	1	71	750-2904-02	FF-REW SPRING	2
31	610-0363-00	EJECT P-ROLLER	1	72	750-2858-01	EJECT P-SPRING	1
32	610-0337-00	GUIDE A-ROLLER	1	73	750-2906-00	IDLER SPRING	2
33	611-0090-04	FLYWHEEL	2	74	750-2907-03	CHANGE L-SPRING	1
34	613-0272-10	GEAR A	1	75	750-2908-02	HEAD SPRING	1
35	613-0273-02	GEAR B	1	76	750-2909-04	ROD SPRING	1
36	613-0274-02	IDLER GEAR	2	77	750-2861-01	SLOT-IN SPRING	1
37	613-0275-03	CHANGE GEAR	1	78	750-2911-01	HOLDING SPRING	1
38	613-0277-02	CHECK GEAR	1	79	750-2912-01	PINCH SPRING	1
39	630-2488-02	SELECT LEVER	1	81	750-2919-03	CHECK SPRING-R	2
40	630-2715-00	FF LEVER-DCP	1	82	750-2857-02	EJECT L-SPRING	1
41	630-2516-00	REW LEVER-DCP	1	83	750-2859-00	OFF ARM SPRING	1

■ ELECTRICAL PARTS LIST

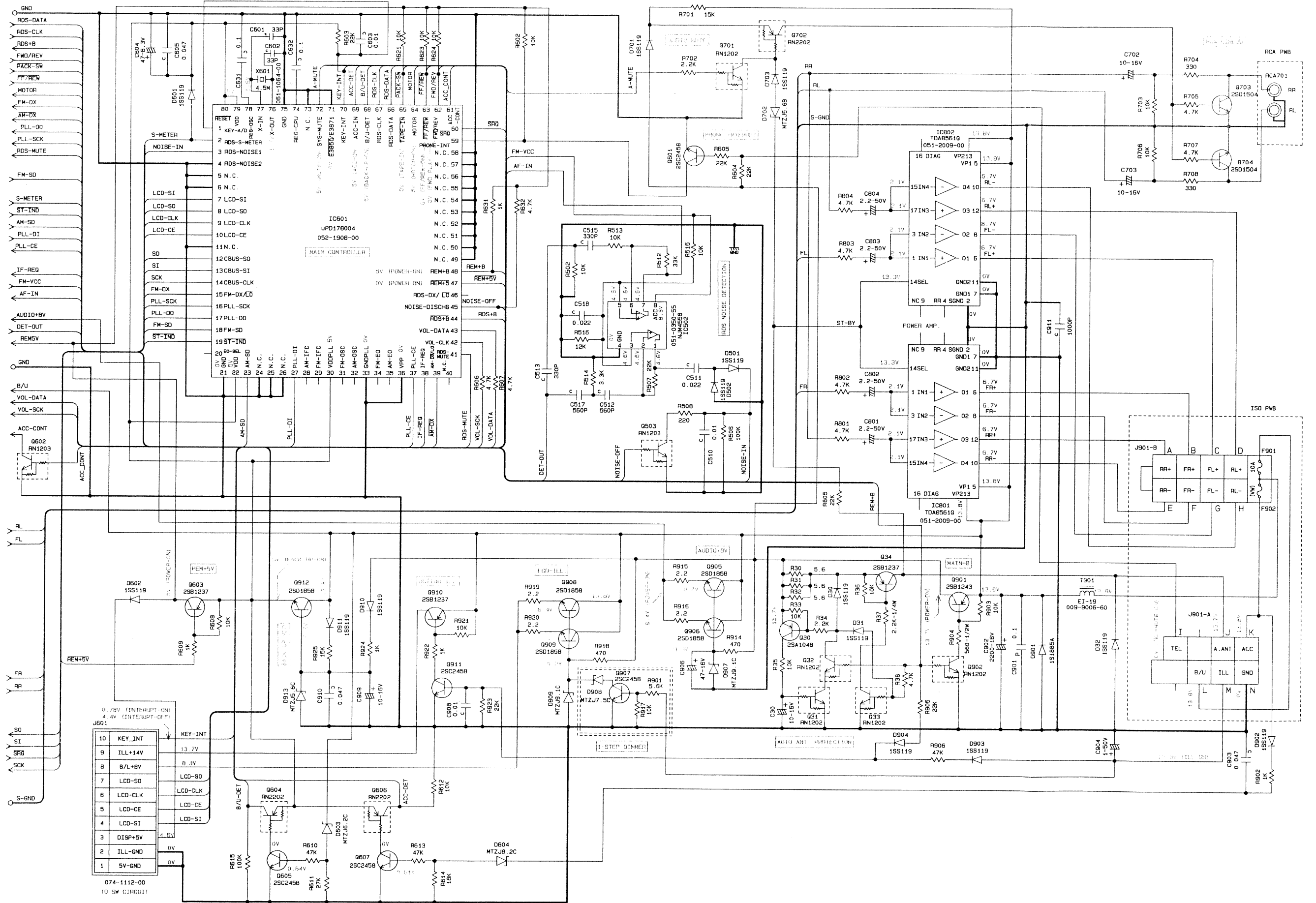
Main PWB

Note: Several different parts of the same reference number are alternative parts.
One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C 30	182-1063-33	16V10μF	C 428	178-5632-05	0.056μF	D 904	001-0330-00	1SS119	R 102	117-2731-10	1/10W 27kΩ	R 303	117-1021-10	1/10W 1kΩ	R 612	117-1031-10	1/10W 10kΩ
C 101	176-1801-00	18pF	C 429	178-5622-05	5600pF	D 907	001-0346-48	MTZJ9.1C	R 103	117-1021-10	1/10W 1kΩ	R 304	117-1031-10	1/10W 10kΩ	R 613	117-4731-10	1/10W 47kΩ
C 102	176-1011-00	100pF	C 430	182-1063-33	16V10μF	D 909	001-0346-48	MTZJ9.1C	R 104	117-1531-10	1/10W 15kΩ	R 305	117-1021-10	1/10W 1kΩ	R 614	117-1831-10	1/10W 18kΩ
C 103	178-1032-05	0.01μF	C 431	183-1073-13	6.3V100μF	D 910	001-0330-00	1SS119	R 105	117-5621-10	1/10W 5.6kΩ	R 306	117-1021-10	1/10W 1kΩ	R 615	117-1041-10	1/10W 100kΩ
C 105	182-1053-63	50V1μF	C 432	182-4763-33	16V47μF	D 911	001-0330-00	1SS119	R 107	117-1021-10	1/10W 1kΩ	R 307	117-1031-10	1/10W 10kΩ	R 621	117-1031-10	1/10W 10kΩ
C 106	178-4732-05	0.047μF	C 501	178-3312-05	330pF	D 913	001-0346-33	MTZJ5.6C	R 108	111-1031-91	1/4WS 10kΩ	R 308	117-1031-10	1/10W 10kΩ	R 623	117-1031-10	1/10W 10kΩ
C 107	178-6822-05	6800pF	C 502	178-1022-05	1000pF	IC 151	051-6201-00	LC72146	R 109	111-1031-91	1/4WS 10kΩ	R 309	117-1031-10	1/10W 10kΩ	R 624	117-1031-10	1/10W 10kΩ
C 108	178-2732-05	0.027μF	C 503	182-4763-13	6.3V47μF	IC 201	051-0301-01	μPC1228H	R 110	117-8231-10	1/10W 82kΩ	R 401	117-2221-10	1/10W 2.2kΩ	R 631	117-1021-10	1/10W 1kΩ
C 109	178-1042-05	0.1μF	C 505	178-5612-05	560pF	IC 301	051-0160-01	HD74LS07	R 111	117-1031-10	1/10W 10kΩ	R 402	117-1031-10	1/10W 10kΩ	R 632	117-4721-10	1/10W 4.7kΩ
C 110	178-2732-05	0.027μF	C 506	182-2253-63	50V2.2μF	IC 401	051-5008-00	M62419FP	R 112	117-1031-10	1/10W 10kΩ	R 403	117-2231-10	1/10W 22kΩ	R 701	117-1531-10	1/10W 15kΩ
C 111	178-4732-05	0.047μF	C 507	178-1042-05	0.1μF	IC 501	051-1819-00	SAA6579	R 113	111-1021-91	1/4WS 1kΩ	R 404	117-1531-10	1/10W 15kΩ	R 702	111-2221-91	1/4WS 2.2kΩ
C 112	178-1032-05	0.01μF	C 508	176-4701-00	47pF	IC 502	051-0350-55	NJM4558M	R 114	117-1031-10	1/10W 10kΩ	R 405	117-4731-10	1/10W 47kΩ	R 703	117-1031-10	1/10W 10kΩ
C 113	182-4763-23	10V47μF	C 509	176-8201-00	82pF	IC 601	052-1908-00	μPD178004	R 115	117-1031-10	1/10W 10kΩ	R 406	117-6831-10	1/10W 68kΩ	R 704	111-3311-91	1/4WS 330Ω
C 114	178-1222-78	1200pF	C 510	178-1032-05	0.01μF	IC 801	051-2009-00	TDA8561Q	R 116	117-1021-10	1/10W 1kΩ	R 407	117-6821-10	1/10W 6.8kΩ	R 705	111-4721-91	1/4WS 4.7kΩ
C 115	173-8221-11	8200pF	C 511	178-2232-05	0.022μF	IC 802	051-2009-00	TDA8561Q	R 117	111-3311-91	1/4WS 330Ω	R 408	117-2221-10	1/10W 2.2kΩ	R 706	117-1031-10	1/10W 10kΩ
C 131	178-4732-05	0.047μF	C 512	178-5612-05	560pF	L 101	010-2330-67	5.6μH	R 118	117-1231-10	1/10W 12kΩ	R 409	117-1031-10	1/10W 10kΩ	R 707	111-4721-91	1/4WS 4.7kΩ
C 132	178-1522-05	1500pF	C 513	178-3312-05	330pF	L 102	010-2230-88	220μH	R 119	111-2711-91	1/4WS 270Ω	R 410	117-2231-10	1/10W 22kΩ	R 708	111-3311-91	1/4WS 330Ω
C 151	176-1501-00	15pF	C 515	178-3312-05	330pF	Q 30	100-1048-00	2SA1048	R 120	117-1021-10	1/10W 1kΩ	R 411	117-1531-10	1/10W 15kΩ	R 801	117-4721-10	1/10W 4.7kΩ
C 152	176-1801-00	18pF	C 517	178-5612-05	560pF	Q 31	125-2003-02	RN1202	R 121	117-3331-10	1/10W 33kΩ	R 412	117-4731-10	1/10W 47kΩ	R 802	117-4721-10	1/10W 4.7kΩ
C 153	178-1032-05	0.01μF	C 518	178-2232-05	0.022μF	Q 32	125-2003-02	RN1202	R 122	111-1031-91	1/4WS 10kΩ	R 413	117-6831-10	1/10W 68kΩ	R 803	117-4721-10	1/10W 4.7kΩ
C 154	176-1011-00	100pF	C 601	176-3301-00	33pF	Q 33	125-2003-02	RN1202	R 131	117-5631-10	1/10W 56kΩ	R 414	117-6821-10	1/10W 6.8kΩ	R 804	117-4721-10	1/10W 4.7kΩ
C 155	176-1011-00	100pF	C 602	176-3301-00	33pF	Q 34	101-1237-00	2SB1237	R 151	111-1021-91	1/4WS 1kΩ	R 415	111-3311-91	1/4WS 330Ω	R 805	111-2231-91	1/4WS 22kΩ
C 156	176-1011-00	100pF	C 603	178-1032-05	0.01μF	Q 102	100-1048-00	2SA1048	R 152	117-1021-10	1/10W 1kΩ	R 501	117-0000-00	JW	R 902	111-1021-91	1/4WS 1kΩ
C 157	176-1011-00	100pF	C 604	182-4763-13	6.3V47μF	Q 103	100-1048-00	2SA1048	R 153	117-1021-10	1/10W 1kΩ	R 502	117-1031-10	1/10W 10kΩ	R 903	111-1031-91	1/4WS 10kΩ
C 158	182-4763-13	6.3V47μF	C 605	178-4732-05	0.047μF	Q 104	102-3113-00	2SC3113	R 154	117-1031-10	1/10W 10kΩ	R 505	117-2221-10	1/10W 2.2kΩ	R 904	111-5611-81	1/2WS 560Ω
C 159	178-1042-05	0.1μF	C 631	178-1042-05	0.1μF	Q 105	102-3113-00	2SC3113	R 155	111-2231-91	1/4WS 22kΩ	R 506	117-1041-10	1/10W 100kΩ	R 905	111-2231-91	1/4WS 22kΩ
C 160	182-2253-63	50V2.2μF	C 632	178-1042-05	0.1μF	Q 106	125-0003-02	RN2202	R 156	117-1021-10	1/10W 1kΩ	R 507	117-2231-10	1/10W 22kΩ	R 906	117-4731-10	1/10W 47kΩ
C 161	176-1011-00	100pF	C 702	182-1063-33	16V10μF	Q 107	103-1504-00	2SD1504	R 157	117-2221-10	1/10W 2.2kΩ	R 508	117-2211-10	1/10W 220Ω	R 914	111-4711-91	1/4WS 470Ω
C 201	178-1822-05	1800pF	C 703	182-1063-33	16V10μF	Q 201	101-1240-00	2SB1240	R 158	117-1031-10	1/10W 10kΩ	R 512	117-3331-10	1/10W 33kΩ	R 915	111-2291-91	1/4WS 2.2Ω
C 202	178-1822-05	1800pF	C 801	182-2253-63	50V2.2μF	Q 202	125-2003-03	RN1203	R 159	117-1031-10	1/10W 10kΩ	R 513	117-1031-10	1/10W 10kΩ	R 916	111-2291-91	1/4WS 2.2Ω
C 203	182-1053-63	50V1μF	C 802	182-2253-63	50V2.2μF	Q 501	125-0003-02	RN2202	R 201	117-3331-10	1/10W 33kΩ	R 514	117-3321-10	1/10W 3.3kΩ	R 918	111-4711-91	1/4WS 470Ω
C 204	182-1053-63	50V1μF	C 803	182-2253-63	50V2.2μF	Q 503	125-2003-03	RN1203	R 202	117-3331-10	1/10W 33kΩ	R 515	117-1031-10	1/10W 10kΩ	R 919	111-2291-91	1/4WS 2.2Ω
C 205	183-1073-13	6.3V100μF	C 804	182-2253-63	50V2.2μF	Q 601	102-2458-00	2SC2458	R 203	117-8201-10	1/10W 82Ω	R 516	117-1231-10	1/10W 12kΩ	R 920	111-2291-91	1/4WS 2.2Ω
C 206	178-2732-05	0.027μF	C 901	172-1041-11	0.1μF	Q 602	125-0003-02	RN1203	R 204	117-1241-10	1/10W 120kΩ	R 602	111-1031-91	1/4WS 10kΩ	R 921	117-1031-10	1/10W 10kΩ
C 207	182-4763-33	16V47μF	C 902	184-2283-32	16V2200μF	Q 603	101-1237-00	2SB1237	R 205	117-4721-10	1/10W 4.7kΩ	R 603	117-2231-10	1/10W 22kΩ	R 922	111-1021-91	1/4WS 1kΩ
C 208	178-2732-05	0.027μF	C 903	178-4732-05	0.047μF	Q 604	125-0003-02	RN2202	R 206	117-4721-10	1/10W 4.7kΩ	R 604	117-2231-10	1/10W 22kΩ	R 923	117-2231-10	1/10W 22kΩ
C 209	183-1073-13	6.3V100μF	C 904	182-1053-63	50V1μF	Q 605	102-2458-00	2SC2458	R 207	117-1241-10	1/10W 120kΩ	R 605	117-2231-10	1/10W 22kΩ	R 924	111-1021-91	1/4WS 1kΩ
C 301	178-1032-05	0.01μF	C 906	182-4763-33	16V47μF	Q 606	125-0003-02	RN2202	R 208	117-8201-10	1/10W 82Ω	R 606	117-4721-10	1/10W 4.7kΩ	R 925	117-1531-10	1/10W 15kΩ
C 401	182-3343-63	50V0.33μF	C 908	178-1032-05	0.01μF	Q 607	102-2458-00	2SC2458	R 209	111-5611-91	1/4WS 560Ω	R 607	117-4721-10	1/10W 4.7kΩ	SUP 101	060-0122-10	DSP-201M-S00B
C 403	182-1063-33	16V10μF	C 909	182-1063-33	16V10μF	Q 701	125-2003-02	RN1202	R 210	111-1021-91	1/4WS 1kΩ	R 608	111-1031-91	1/4WS 10kΩ	T 901	009-9006-60	
C 404	182-1063-33	16V10μF	C 910	178-4732-05	0.047μF	Q 702	125-0003-02	RN2202	R 211	111-1031-91	1/4WS 10kΩ	R 609	117-1021-10	1/10W 1kΩ	X 151	061-1066-00	7.2MHz
C 405	182-1063-33	16V10μF	C 911	178-1022-05	1000pF	Q 703	103-1504-00	2SD1504	R 301	111-1001-91	1/4WS 10Ω	R 610	117-4731-10	1/10W 47kΩ	X 501	061-3013-00	4.5MHz
C 407	176-5601-00	56pF	D 30	001-0330-00	1SS119	Q 704	103-1504-00	2SD1504	R 302	111-1001-91	1/4WS 10Ω	R 611	117-2731-10	1/10W 27kΩ	X 601	061-1064-00	4.33MHz
C 408	182-4753-53	35V4.7μF	D 31	001-0330-00	1SS119	Q 901	101-1243-00	2SB1243									
C 409	176-1511-00	150pF	D 32	001-0330-00	1SS119	Q 902	125-2003-02	RN1202									
C 410	182-2263-33	16V22μF	D 301	001-0330-00	1SS119	Q 905	103-1858-00	2SD1858									
C 411	182-4753-53	35V4.7μF	D 302	001-0330-00	1SS119	Q 906	103-1858-00	2SD1858									
C 412	178-8232-05	0.082μF	D 303	001-0330-00	1SS119	Q 908	103-1858-00	2SD1858									
C 413	178-5622-05	5600pF	D 304	001-0330-00	1SS119	Q 909	103-1858-00	2SD1858									
C 414	178-5632-05	0.056μF	D 401	001-0346-23	MTZJ4.3B	Q 910	101-1237-00	2SB1237									
C 415	178-5622-05	5600pF	D 501	001-0330-00	1SS119	Q 911	102-2458-00	2SC2458									
C 416	182-1063-33	16V10μF	D 502	001-0330-00	1SS119	Q 912	103-1858-00	2SD1858									
C 417	182-1063-33	16V10μF	D 601	001-0330-00	1SS119	R 30	111-5691-91	1/4WS 5.6Ω									
C 418	182-1063-33	16V10μF	D 602	001-0330-00	1SS119	R 31	111-5691-91	1/4WS 5.6Ω									
C 419	182-1063-33	16V10μF	D 603	001-0346-36	MTZJ6.2C	R 32	111-5691-91	1/4WS 5.6Ω									
C 421	176-5601-00	56pF	D 604	001-0346-45	MTZJ8.2C	R 33	117-1031-10	1/10W 10kΩ									
C 422	182-4753-53	35V4.7μF	D 701	001-0330-00	1SS119	R 34	111-2221-91	1/4WS 2.2kΩ									
C 423	176-1511-00	150pF	D 702	001-0346-32	MTZ												

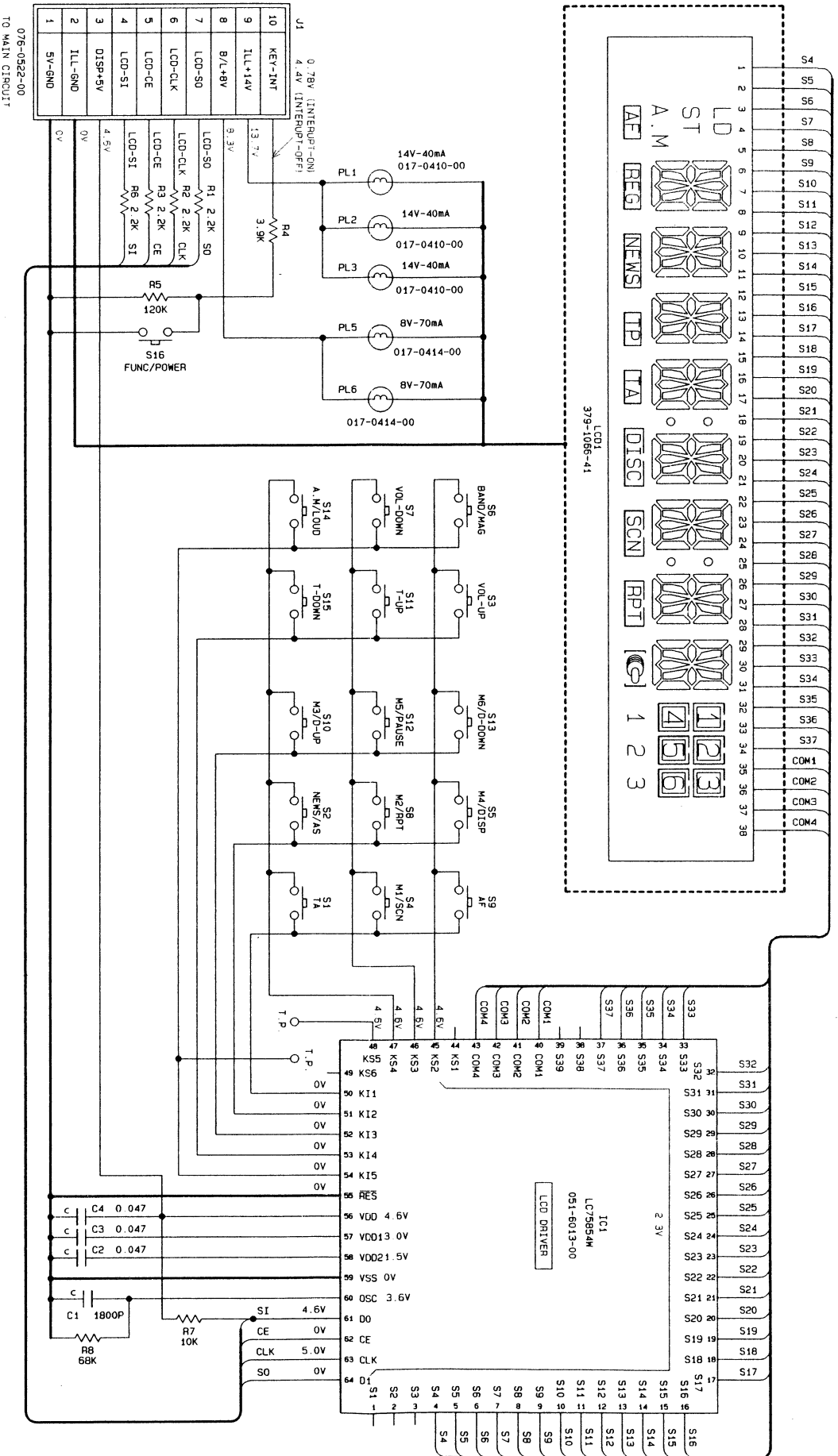
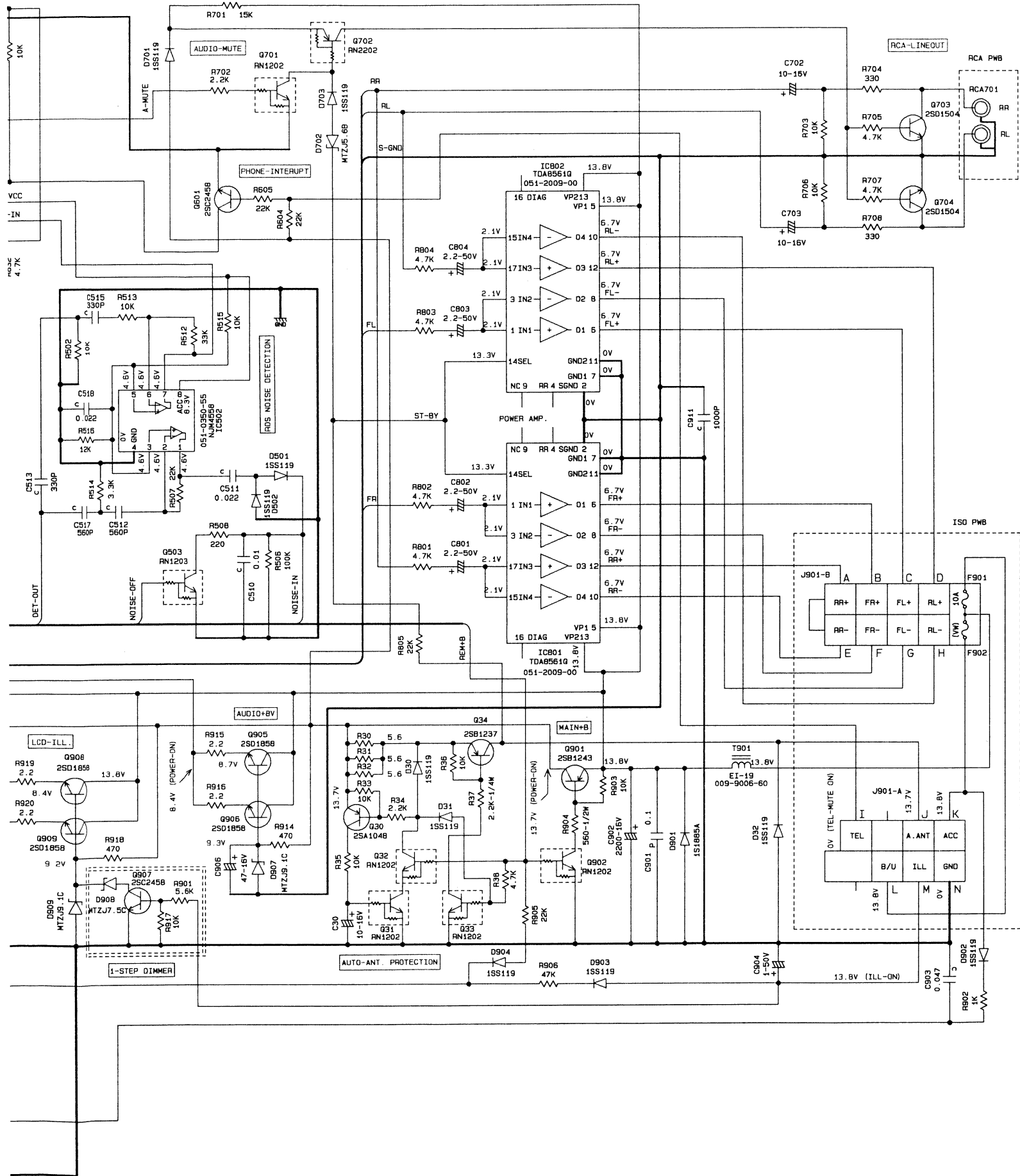
Main / Connector P.W.B. section





CIRCUIT DIAGRAM

Switch / Connector section



Main P.W.B. section

